



Conferencing Systems

Video Made Easy

VCB VCBPro

Getting Started Guide

Version 6.0

© 2007 Emblaze-VCON Ltd. All Rights Reserved.

Information in this document is subject to change without notice. No part of this document can be reproduced or transmitted in any form or by any means - electronic or mechanical - for any purpose without written permission from Emblaze-VCON Ltd.

Media Xchange Manager is a registered trademark of Emblaze-VCON Ltd.

All other product names are trademarks or registered trademarks of their respective companies or organizations.

Limited Warranty

Emblaze-VCON Ltd. warrants that SOFTWARE will perform according to accompanying user documentation for a period of 90 (ninety) days from the date of receipt; replacement SOFTWARE will be warranted for 90 (ninety) days from the date of receipt. This Limited Warranty shall not apply to any product that in the opinion of Emblaze-VCON Ltd. has not been installed or upgraded according to accompanying documentation from Emblaze-VCON Ltd. or been subject to misuse, misapplication, negligence or accident while in the hands of the purchaser.

GRANT OF LICENSE Emblaze-VCON Ltd. grants the Purchaser a non-exclusive and non-transferable license to use the SOFTWARE product and to make one copy solely for backup or archival purposes, which may include user documentation provided via online or other electronic form. Additional copies may not be made nor may anyone else be allowed to copy or otherwise reproduce any part of the licensed software without prior written consent of Emblaze-VCON Ltd.

COPYRIGHT All trademarks(s), logo(s), name(s), software, documentation and other supporting materials relating to the Product are trademarked, copyrighted or owned by Emblaze-VCON Ltd. as proprietary information protected by United States copyright laws and international and applicable national treaty provisions and laws. Software protection extends beyond its literal code to structure, sequence and organization; any unauthorized use or modification would constitute a misappropriation of Emblaze-VCON's proprietary rights and a violation of the License agreement.

LIABILITIES Emblaze-VCON's entire liability and the Purchaser's exclusive remedy shall be at Emblaze-VCON's option, either return of the price paid or repair/replacement of the Product not meeting Emblaze-VCON's declared Limited warranty. Emblaze-VCON or its suppliers shall not be liable in any event to anyone for any indirect, incidental, consequential, special or exemplary damages including without limitation damages for loss of business profits, business interruptions, business information or other pecuniary loss arising out of the use of or inability to use the said Product even if advised of the possibility of such damages. In any case, Emblaze-VCON's entire liability under any provision of this agreement shall be limited to the amount actually paid by the Purchase for the Product.

Emblaze-VCON Technical Support

This Getting Started Guide was designed to help you set up and work with your VCB easily so that you can enjoy its many features.

This User’s Guide was designed to help you set up and work with your VCB easily so that you can enjoy its many features.

If a situation occurs that is not covered by the supplied documentation, contact your local Emblaze-VCON distributor, and request assistance from their Emblaze-VCON-trained technical support department. Please describe the problem, device, and PC operating system (if applicable), and any other relevant details.

Also, you may access the Technical Support section of the Emblaze-VCON website (<http://www.emblaze-vcon.com/support/index.shtml>) in order to check its knowledge base or initiate other customer support processes:

Page	Type of support
Support Notes	Troubleshoot or receive technical information about specific Emblaze-VCON products.
Downloads	Download a new software release or a free product evaluation.
Demo Numbers	Test your videoconferencing system.
License Key Requests	Request a permanent license key for your organization’s MXM(s).

TABLE OF CONTENTS

Top	i
Limited Warranty	iii
Emblaze-VCON Technical Support.....	iv
Table of Contents	3
1 Welcome to the VCB.....	1
1.1 Introduction.....	1
1.2 Package Contents	3
2 Defining the VCB IP Configuration	5
2.1 Retrieving VCB initial IP configuration	5
2.2 Assigning a Static IP Address to a VCB with DHCP address.....	7
3 Logging into the VCB.....	11
4 Setting Up the VCB.....	15
4.1 VCB Settings	15
MCU Settings.....	15
Administrators List	18
4.2 VCB Services Configuration	20
General.....	21
Layouts	24
Media	26
QoS.....	29
Advanced	30
4.3 VCB System Upgrade & Restore	32
Upgrading VCB.....	32
VCB Restart / Shutdown	33
VCB Backup/Restore.....	34
System Restore	35
Take Snapshot	36
4.4 VCB registration to Remote MXM	37
5 Setting Up a Dedicated VCB Service	39
5.1 Dedicated Service for End Points.....	39
5.2 Dedicated Service for a Zone.....	41
6 Adding the VCB to an Ad-hoc Permission Group	43
6.1 Ad-hoc Permission Group Properties	44
General.....	44
Permission Group.....	45
7 Ad-Hoc Conferencing	47

7.1	Inviting from vPoint™/vPoint HD	47
7.2	Inviting from HD3000/2000/1000/600	48
7.3	Inviting from HD5000/4000	49
7.4	Inviting from Other H.323 Videoconferencing Applications	50
8	Chair Control During Conferences.....	51
9	Upgrading the VCB License Key.....	57
10	SSH Commands	59
10.1	Descriptions of SSH Commands	59

1 WELCOME TO THE VCB

1.1 Introduction

The VCB, Emblaze-VCON's premier Multipoint Conferencing Unit (MCU), enables:

- ☐ Initiation and management of multipoint conferences, including both scheduled and ad-hoc conferences, which are multipoint sessions that were expanded from point-to-point calls.
- ☐ Wide range of rich, dynamic layouts for the simultaneous viewing of several participants. Up to 25 users may be displayed at the same time.
- ☐ Web-based management/configuration, videoconference scheduling/moderating and Reporting applications.
- ☐ Simultaneous multicast streaming of active conferences and multimedia to multiple passive participants.

The VCB includes advanced features, such as video and audio transcoding, support of high definition video resolutions, as well as basic features such as continuous presence, presenter mode, password-protected conferences and voice-activated switching.



1 Welcome to the VCB

The VCB includes the Conference Moderator, which provides administrators and users with the ability to schedule conferences in advance, also from within MS - Outlook, and to manage them remotely. At the appointed time, the Conference Moderator initiates the conference and connects the conference participants. Conference hosts can also control when participants join or exit sessions, and transmit video and data streams to the participants. For more details, see the *Conference Moderator Help*.

The VCB's robust Chair Control provides several options for displaying conference participants. A rich selection of predefined layouts expands on the traditional methods of Continuous Presence and Voice-activated Switching. Additionally, conference organizers can choose among the following view switching modes for each session:

Lecture	Showing the Lecturer in full screen mode for all participants. Lecturer see a pre-define Continuous Presence layout of all participants.
Dominant Speaker	Showing the most recent speakers in the conference or from within predefined groups.
Fixed Image	Showing specific views throughout the conference's duration.
Timer Image	Showing a rotation of Continuous Presence views, changing at timed intervals.

The VCB supports the following:

- ☐ H.261/H.263/H.263+/H.263++/H.264 video transcoding support in Voice-activated Switching and in Continuous Presence.
- ☐ G.711, G.722 and G.722.1 Annex C, G.723.1, G.728, G.729 and AAC-LD audio algorithms with audio transcoding, allowing users to participate in a multipoint conference using different audio standards.
- ☐ Up to 4 Mbps data rate per participant in Voice-activated Switching and in Continuous Presence.
- ☐ Dial-in conference initiation.
- ☐ Password protected conferences.
- ☐ Voice notifications in different languages.
- ☐ Handles calls connecting up to 48 concurrent users.
- ☐ Support for sessions including H.323 end points/devices and SIP User Agents (through the MXM's embedded SIP proxy server).
- ☐ Multi-point sessions can be joined (cascaded) onto other sessions.

- ☐ Applies H.239 support with HD DualStream™, in which both video and data application-sharing may be transmitted to conference participants (whose end points support dual streams). End points that don't support dual streams will receive either the data or video stream, depending on the active VCB Service's configuration.
- ☐ H.239 streams may be sent in CIF, 4CIF, VGA, SVGA, or XGA.
- ☐ Mode switching, allowing participants to choose the type of viewing mode (Dominant Speaker, Fixed Image or Timer Mode) during a conference.
- ☐ Symmetric bandwidth usage during Continuous Presence calls.
- ☐ Protection of calls using H.235 (AES) encryption.
- ☐ Optional deployment of Emblaze-VCON vPoint HD videoconferencing clients.

1.2 Package Contents

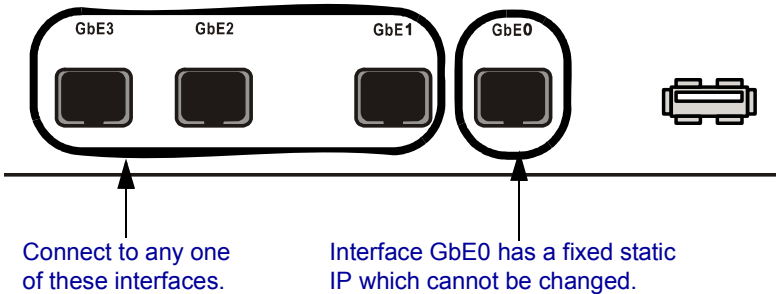
When you open the VCB shipping package for the first time, check that the following items are included. If any of the items (according to your Customer Order) are missing or damaged, contact your Emblaze-VCON representative immediately.

- VCB Server unit
- Power cables (2)
- Network cable
- Crossover cable
- User Guide and Utilities CD-ROM
- Getting Started Guide

2 DEFINING THE VCB IP CONFIGURATION

Before you can use the VCB for the first time, you have to define a unique IP configuration for it. This task is made up of the following procedures:

- ☐ Retrieving the VCB's initial IP configuration
- ☐ Changing the IP configuration to unique settings, such as a static IP address



For standard operation, we recommend that you connect one NIC/one interface. If nevertheless, you require connection through more than one NIC, each NIC must belong to a different subnet.

Connect a network cable to the interface you configured only after completing the configuration.

2.1 Retrieving VCB initial IP configuration

The following procedure describes how to get the IP address from the VCB unit's front panel.

- 1 Connect a network cable to any one of interfaces GbE1 to GbE3.
- 2 Turn the VCB unit on. A welcome message appears in the LCD display.

Welcome>

2 Defining the VCB IP Configuration

- 3 In the LCD display, press an arrow button until the **GET IP** command appears. Press the **Enter** button.



- 4 Press an arrow button again until the connected network card and interface appears (**NIC 1** to **NIC 3** = GbE1 to GbE3) and press the **Enter** button. The VCB unit receives an IP address from the DHCP server.

```
Select NIC:  
1  
172.20.21.22
```



If a cable is not connected to the interface, **0.0.0.0** appears in the display.

- 5 Leave the cable connected to the chosen interface.

2.2 Assigning a Static IP Address to a VCB with DHCP address

This procedure describes how to set static IP Address when the VCB is connected to the network and has acquired a DHCP address.

From a remote computer connected to the network, connect to the VCB Configuration application, EVCAAdmin, using web browser.

- 1 Open web browser and in the address field, enter the EVCAAdmin URL: <IP Address>/EVCAAdmin.
- 2 EVC Home page loads. Click on the EVCAAdmin section.
- 3 Enter login name and password. Default name is su and default password is 1234.
- 4 Under the VCB tab, click on Network.
- 5 A list of all network interfaces is displayed.

Settings Services Network System				
Adapter Name ↓	IP Mode	IP Address	Subnet Mask	Default Gateway
g0	Static IP	0.0.0.0		
g1	Static IP	172.20.1.56	255.255.0.0	172.20.0.254
g2	DHCP	0.0.0.0		
g3	DHCP	0.0.0.0		

- 6 Select a different NIC than the one you are currently connected to. Click on its name to open the configuration page.

Adapter Details

Adapter Name: Gb1

☐ Obtain address from DHCP server

IP Address:

Subnet Mask:

Default Gateway:

DNS Server:

☒ Update configuration files

2 Defining the VCB IP Configuration

- 7** Assign static IP by entering IP Address, Subnet Mask and Default Gateway. DNS Server is optional.



The configured NIC has to be different than the one you are currently connected to.

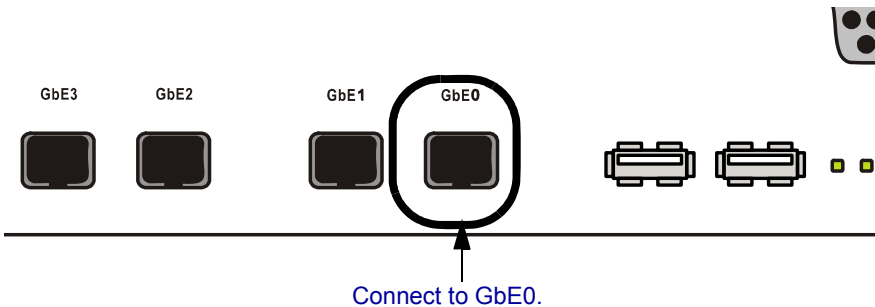
- 8** Check the Aupdate Configuration Files checkbox for all VCB modules to be updated with new IP configuration.
- 9** Click Apply.
- 10** Connect a network cable to the configured NIC. Check the correct IP Address has been set through the LCD display.

2.3) Assigning a Static IP Address to the VCB through interface GbE0

This procedure describes how to set static IP Address while connecting to Factory Default GbE0.

- 1 Connect a crossover cable between interface GbE0 and a computer.
This interface's IP configuration is:

IP address	10.0.10.10
Subnet mask	255.255.0.0
Gateway IP address	0.0.0.0



- 1 To access the VCB unit from another computer initially, the two systems must, at least temporarily, belong to the same network segment. That is, the first three fields of the address and the subnet mask must be identical.
Write down the computer's current IP address and subnet mask so that you can restore them later.
Change the remote computer's IP configuration temporarily to the same IP address segment(10.0.10.x) and subnet mask listed in step 1.
- 2 On the computer, open web browser and in the address field, enter the VCB's IP address.
- 3 EVC Home page loads. Click on the EVCAAdmin section.
- 4 Enter login name and password. Default name is su and default password is 1234.
- 5 Under the VCB tab, click on Network.
- 6 A list of all network interfaces is displayed.
- 7 Select NIC interface. Click on its name to open the configuration page.

- 8** Assign static IP by entering IP Address, Subnet Mask and Default Gateway. DNS Server is optional.
- 9** Click Apply.
- 10** Connect a network cable to the configured NIC. Check the correct IP Address has been set through the LCD display.

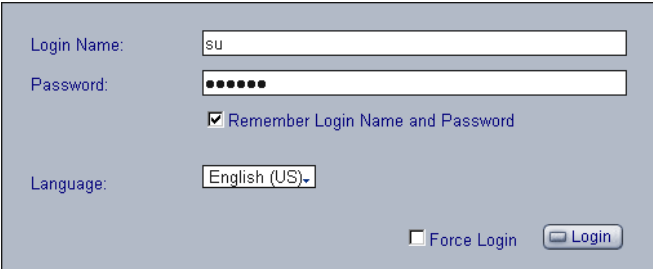
3 LOGGING INTO THE VCB

When you start the VCB program, you must first log in.

Emblaze-VCON’s Media Xchange Manager® (MXM) provides gatekeeper functions for the VCB. The MXM manages the videoconferencing environment among end points registered in it, including multipoint conferencing managed by the VCB.

► **To log in to the VCB**

- 1 In your web browser, enter the URL of your VCB. The Login page appears.



Logging Into the VCB

- 2 Enter your login name and password. The factory-defined login configuration is:

User Name	su
Password	1234

- 3 If necessary, define the following:

Remember Login Name and Password	Select to allow the system to use the same login values in the future.
Language	Language of the management program.
Force Login	If a user with the same Login Name is already connected from a different location, this login attempt will succeed, disconnecting the other user.

- 4 Click **Login**.

3 Logging into the VCB

- 5 Click the **VCB** tab to enter the VCB Configuration pages.

VCB Configuration is divided into Settings, Services, Network and System.

Settings	Services	Network	System
MCU details		Licens	
General:			
Description:	<input type="text" value="VCB_ON_VCB_13607"/>		
Location:	<input type="text"/>		
Network Address:	172.20.1.56		
Product info:			
Vendor ID:	88;0;1		
Product ID:	VCB:H323:VCB2500		
Version ID:	420		
Build number:	6.0.M08.D08.Y07.VCB2500		
Licensing:			
Licensed ports:	12		
Status:			
Last log on:	08/09/2007 14:24:35		
Last log out:	None		
Gatekeeper:			
Gatekeeper address:	<input type="text" value="172.20.1.31"/>		
Port Configuration:			

VCB Settings - MCU Details

3 Logging into the VCB

- 6 When you have more than one VCB registered to the MXM running on the server you are currently connected to, these VCB's are listed in the left pane of the page. clicking on a specific VCB will show its details and will allow you to configure it.
- 7 Network settings like IP address, Date and Time and also recovery of the VCB server can be done only by connecting directly to this specific VCB server.



VCB Settings - MCU Details

3 Logging into the VCB

4 SETTING UP THE VCB

This chapter provides instructions for setting the VCB configuration in the VCB Configuration program, and describes the properties so that you can set up the most suitable configuration for your installation.

4.1 VCB Settings

The **Settings** tab contains general device configuration. These appear under the MCU Settings and Administrators categories.

MCU Settings

► To display MCU Settings

- 1 After logging in, click the **Settings** tab and then **MCU Details**.
- 2 On this page, you can edit the parameters listed below. The other parameters are read-only and cannot be edited in the VCB Configuration program (for descriptions, see page 16).

Description	Identity of the VCB. This name will appear in the MXM Administrator after the login process is finished.
Location	Physical location of the VCB.
Gatekeeper Address	IP address of the MXM or H.323 gatekeeper.
Defaults	Click to restore the default port configuration.
RTP Ports Start At	The lowest port number allocated for video and audio during videoconferences. This allocation meets the Real-Time Protocol (RTP) and Real-Time Control Protocol (RTCP) specifications, which enable applications to synchronize and spool audio and video information.
H.245 Port Range	The lowest port number allowed for end-to-end signalling of multimedia during videoconferences This allocation provides for H.245 functions, such as capability exchange, signalling of commands and indications, and messages to open and fully describe the content of logical channels.

4 Setting Up the VCB

3 To implement the changes, click **Apply**.

I

SettingsServicesNetworkSystem

MCU details

Licens

General:

Description:VCB_ON_VCB_13607

Location:

Network Address:172.20.1.56

Product info:

Vendor ID:88;0;1

Product ID:VCB:H323:VCB2500

Version ID:420

Build number:6.0.M08.D08.Y07.VCB2500

Licensing:

Licensed ports:12

Status:

Last log on:08/09/2007 14:24:35

Last log out:None


Gatekeeper:

Gatekeeper address:172.20.1.31

Port Configuration:

In the **MCU Settings** tab, the following properties are read-only:

Network Address	IP address of the VCB.
Vendor ID	Identity of the manufacturer.
Product ID	Manufacturer's identity of the product.
Version ID	Manufacturer's version identification of the product.

Build Number	Version information for the VCB.
Licensed Ports	Maximum number of concurrent participants that may be serviced by in this VCB.
Last Log On	Most recent date that the VCB logged in to the MXM or H.323 gatekeeper.
Last Log Out	Most recent date that the VCB logged out of the MXM or H.323 gatekeeper.
	If the Last Log On date is later than the Last Log Out date, the selected node is currently logged into the MXM.

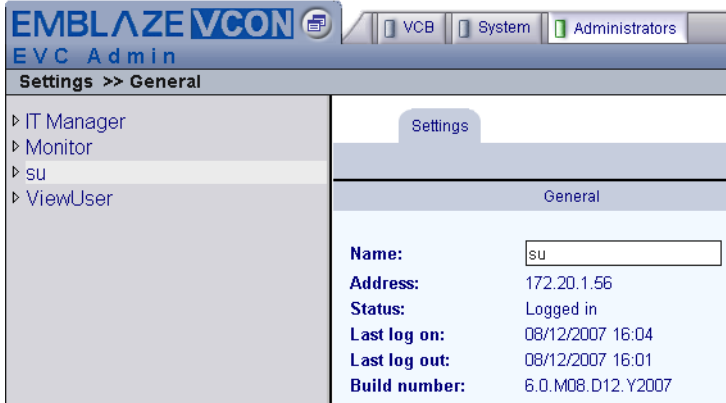
4 Setting Up the VCB

Administrators List

The **Administrator** tab lists administrators with permission to work with the VCB.

► To display the list of Administrators

- ☐ In the **upper bar** , click **Administrators** tab.



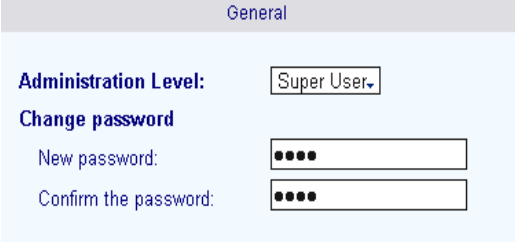
List of Administrators

► To Add New Administrator

- 1 Click on the Add button at the bottom of the page.
- 2 A new administrator is created with a default name and a default password of 1234.
- 3 Select the new administrator and change its name. Click Apply.
- 4 Go to the Security tab and set administrative level and change the password. Click Apply.

➤ To change an Administrator password

- 1 In the left pane, click the **Name** of the Administrator you want to change password to. Click on the **Security** tab.



General

Administration Level: Super User

Change password

New password: [password field]

Confirm the password: [password field]

Changing Administrator Password

- 2 In the **Security** tab, do the following:



To keep the same password, leave the **Password** boxes blank.

New Password Type a new password for the administrator.

Confirm the Password Type the new password again.

- 3 Click **Apply**.

4 Setting Up the VCB

4.2 VCB Services Configuration

VCB Services define the usage of resources used during a multipoint videoconference managed by the VCB.

After the VCB's installation, you can add or edit service entries. One directory number (E.164) is created for each service type.



To handle situations in which additional participants require additional resources, set up several VCB Services with incremental increases in bandwidth, number of ports, or multicast capabilities.

Settings Services Network System											
	Index	Description	Number	Status	Bandwidth	Mode	Participants	Ad-hoc	Multicast		
<input type="checkbox"/>	01	384K management	1004		512	<table><tr><td></td><td></td></tr></table>			8	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	02	1000	1000		448	<table><tr><td></td><td></td></tr></table>			8	<input checked="" type="checkbox"/>	<input type="checkbox"/>

List of VCB Services

➤ To add a VCB Service

- ☐ At the bottom of the list of services, click **Add**. A new VCB Service entry appears in the list with the default configuration.

➤ To edit a VCB Service

- Click the name of the VCB Service in the **Description** column. The Service Configuration page opens. The Configuration includes the following categories (each in its own tab on the page).
 - General
 - Layouts
 - Media
 - QoS
 - Advanced
- Change properties according to your service specifications, or keep the default settings. When you finish each page, click **Apply** to implement the changes. For explanations about the various properties, see the following subsections.
- When you finish editing the configuration, click **List** to return to the Services list.

► To delete a VCB Service

- 1 Click the checkbox to the left of the VCB Service entry.
- 2 Click **Delete**.
- 3 Click **OK** to confirm.

The following subsections describe the VCB Service properties.

General

In the **General** page, enter identity information of the VCB Service.

Settings		Services	Network	System
MCU details		License		
General:				
Description:	VCB_ON_VCB_13607			
Location:				
Network Address:	172.20.1.56			
Product info:				
Vendor ID:	88;0;1			
Product ID:	VCB:H323:VCB2500			
Version ID:	420			
Build number:	6.0.M08.D08.Y07.VCB2500			
Licensing:				
Licensed ports:	12			
Status:				
Last log on:	08/09/2007 14:24:35			
Last log out:	None			
Gatekeeper:				
Gatekeeper address:	172.20.1.31			
Port Configuration:				
<input type="button" value="Defaults"/>				
RTP ports start at:	5004			
H.245 ports start at:	3002			

VCB Service - General

4 Setting Up the VCB

In the **General** tab, the following properties appear:

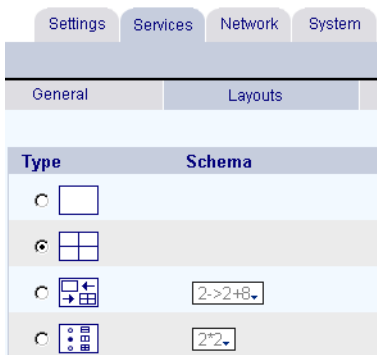
Number	Number to be dialed for using this service.
Description	Name of the service. This name identifies the service in the VCB Services List.
Max Number of Participants	The maximum number of concurrent calls allowed in this session, according to your VCB's license terms.
Reserve Ports	<p>If selected, the VCB reserves an equal number of ports as the number of maximum users in this session, in accordance with your VCB license terms.</p> <p>For example, if the session is limited to a maximum of 8 participants, the VCB will reserve 8 ports. None of those ports will be available for other sessions.</p>
Optimize for number of participants	The number of participants that VCB will optimize resources for. For example, If there are going to be only 5 participants in a conference, VCB will divide its resources so that each one of these 5 participants will receive the best video quality his VC system can handle.
Conference Bandwidth	Maximum bandwidth available for each participant.
Ad-Hoc	Select to enable expansion of this service to an Ad-Hoc conference.
Enable Voice Notifications	Enable voice notifications to be played when participants join the conference, participants leave the conference and when dialing a password protected conference.
Notification Language	Select the language in which notifications will be played.
Service Password / Confirm Password	A conference can be password protected to ensure that only authorized participants can connect to it. Password has to contain 4 to 8 numeric characters. Confirm password to validate it.
Multicast	Select to enable streaming sessions.
Session Name	Type a name to identify this service's multicast streaming session.
Session Description	Type a name or description of the multicast session.
Media Formats	Select the video and audio codecs and the video resolution in which the multicast streaming session will be transmitted.

Audio Codec	Select the Audio codec for the multicast streaming session.
Video Codec	Select the Video codec for the multicast streaming session.
Video Size	Select the resolution in which the multicast video will be transmitted.
Broadcast to Address	The destination IP address for the multicast session. All participants in the session transmit and receive from this common IP address. This address must be a class D address in the range of 224.0.0.0 to 239.255.255.255 .
Video Refresh Rate	Define the interval at which the end point broadcasting the multicast synchronizes the video display at the receiving ends.
Media Packets TTL	The maximum number of routers (hops) that the multicast session's packets may pass through.
SDP Rate	Session Description Protocol Rate - The interval at which announcements and descriptions of the multicast session are sent out on the Internet Multicast backbone (Mbone), for Participants and passive third-party viewers.
SDP TTL	The maximum number of routers (hops) that the SDP announcement for this session may pass through.

4 Setting Up the VCB

Layouts

In the **Layouts** tab, define the layout for displaying multiple users on the screen at the same time.



VCB Service - Layouts

Choose the type and if necessary, scheme for the layout:



Display one user at a time.



Display up to four users at a time.



Display changes automatically depending on the number of users in the conference.

1->2->3->2*2->3*3->4*4

1 = 1 user

2 = 2 users

3 = 3 users

2*2 = 4 users in 2 rows

3*3 = 5-9 users in 3 rows

4*4 = 10-16 users in 4 rows.

5*5 = 16-25 users in 5 rows.

2->2+8

When over 2 users participate, one row of 2 users and another row of 8 windows open; each additional user appears in a window and unused windows remain empty.

1->1+5->1+7

1=1 user

1+5=2-6 users

1+7=7-8 users.



Display users in the same layout scheme regardless of the number of the users in the call.

In the **Schema** list, choose the layout.

4 Setting Up the VCB

Media

The **Media** tab contains the settings for audio formats, video formats and dual-video streaming.

SettingsServicesNetworkSystem

GeneralLayoutsMediaQoSAdvanced

Audio:

☒ G.722

☒ G.728

☒ G.723.1

☒ G.711 A-Low

☒ G.711 u-Low

☒ G.722.1 24K

☒ G.722.1 32K

☒ G7221 Annex C

Video:

Video Codecs

☒ H.261

☒ H.263

☒ H.264

Max. Resolution Out:

720p (1280x720)

☐ Keep aspect ratio

Dual video:

Format:

H.263

Size:

XGA (1024x768)

Method:

H239

☒ Send second Video channel to legacy

VCB Service - Media

Audio

In the **Audio** list, select the codecs that are available for conferences using this specific VCB Service.

Participants can use any Audio codec. Checking all or specific audio codecs will make VCB to mix (transcode) these codecs.

Video

Video Codecs

The video codecs (**H.261**, **H.263**, **H.264**) used in the conference. Checking 2 or all video codecs will make VCB to mix (transcode) these codecs and will enable participants to join the conference at their system's best capabilities.

- Max Resolution Out** The size of the transmitted video images in outgoing direction:
- **720p (VCBPro Only)** - is a short name for a category of High Definition video modes. The number 720 stands for 720 lines of vertical display resolution, while the letter p stands for progressive scan or non-interlaced.
 - **4CIF** - uses 704 x 576 pixels resolution.
 - **CIF** - (Common Interchange Format), or normal size. CIF uses 352 X 288 pixels resolution.
- Keep Aspect Ratio** Check this option to keep the original aspect ratio of connected sites. Otherwise, VCB will stretch the video image to fit the layout window.

Dual Video

End points that support Emblaze-VCON's HD DualStream™ (vPoint HD, HD5000, HD4000, HD3000 and HD2000) or other dual-video capability can send video and data streams simultaneously to a multipoint conference through the VCB. During a conference, end points supporting HD DualStream can view documents, graphics, and presentations as the main image, while the video appears as a PIP inset on the screen.

Format The video codec (**H.261, H.263, H.264**) used by the streaming source.

Video Format/Size The format and resolution of the transmitted video images.

The available formats are:

- ☐ **CIF** (Common Interchange Format), or normal size - 352x288
- ☐ **VGA** - (Video Graphics Array) 640x480
- ☐ **4CIF** (4 x CIF) - 704x576
- ☐ **SVGA** (Super Video Graphics Array) - 800x600
- ☐ **XGA** (Extended Graphics Array) - 1024x768

4 Setting Up the VCB

Send second video channel to legacy devices

If a receiving end point does not support dual streams, it receives only the stream carrying the shared data application. However, the data appears in video format.

When streaming send second video channel

If data sharing takes place during a multicast conference, the multicast session's Participants receive the data stream only.

QoS

The **QoS** tab contains properties for controlling the type of Quality of Service that will be used for transmitting packets during a multipoint conference that's initiated using this VCB Service.

Settings Services Network System

General Layouts Media QoS Advanced

Priority Type (QoS): IP Precedence

Video Priority: 4 - Flash Override

Audio Priority: 5 - CRITIC / ECP

RTCP Priority: 6 - Internetwork Control

Defaults

Reload Apply List

VCB Service - QoS

Priority Type (QoS)

Select the type of QoS used for transmitting packets during heavy network congestion conditions.

- | | |
|----------------------|---|
| No Priority | Network transfers packets using normal Best-effort (or Routine) packet transmission. |
| IP Precedence | Network gives priority to certain types of bits (video, audio, control) according to the eight levels of IP precedence. |
| Diffserv | Network transfers packets according to specific needs of the sending application. |

Priority Values

Video, Audio and RTPC Priority

For each packet type, select an appropriate priority level. The item with the highest priority number will be sent first, the item with the next highest number will be sent second, and so on.

The priority levels vary, depending on whether the selected Priority Type is IP Precedence or Diffserv.

Defaults

Click to restore the default QoS configuration.

Advanced

In the **Advanced** page, define additional parameters required by the VCB for managing multipoint conferences.

General	Layouts	Media	QoS	Advanced
---------	---------	-------	-----	----------

Encryption Method:

Session settings:

Voice activated switching delay: seconds

☒ Enable FECC

☒ Enable Active Speaker Highlight

☒ Enable On Screen Display

Maximum packet size: bytes

Jitter settings:

Audio Jitter Size: packets

Video Jitter Size: packets

Data Jitter Size: packets

VCB Service - Advanced

Defaults

Click to restore the default configuration for the associated set of parameters.

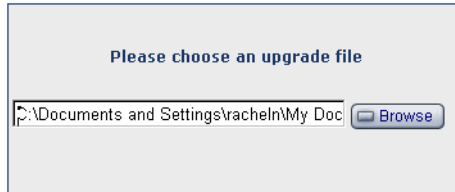
Encryption Method	<p>Choose the mode of encryption for conferences using this service.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Choose None to allow unsecured calls. <input type="checkbox"/> Auto enables the transmitting end point to encrypt a call if the remote sides have also enabled encryption. If they have not enabled encryption, an outgoing call will be unsecured. <input type="checkbox"/> AES (Advanced Encryption Standard) is a common encoding method for encrypting data transmissions. <p>Select this option to encrypt all calls using this VCB Service. If the remote sides have not also enabled encryption, the call attempt will be unsuccessful.</p>
Voice-activated Switching Delay	<p>Delay period before changing the displayed video during a voice-activated switching multipoint conference. The displayed video changes only after the source of the new sound or voice is steady for the defined period. A delay period is necessary to prevent quick incoherent display changes that may be caused by sudden noises (such as a sneeze) rather than a steady speaker.</p>
Enable FECC	<p>Select to enable Far End Camera Control (FECC) to all participants in a conference using this service. Applicable only to Voice-activated Switching mode.</p>
Enable Active Speaker Highlight	<p>Select to display a frame surrounding the active speaker in Continuous Presence layouts.</p>
Enable On Screen Display	<p>Select to display the names of the displayed users in Continuous Presence layouts.</p>
Maximum Packet Size	<p>Set this parameter either equal to or lower than your network's MTU.</p>
Audio/Video/Data Jitter Size	<p>Smooth playback of transmitted media continues even if the packets arrive out of order at the receiving end, up to the number of packets defined here for each packet type.</p>

4 Setting Up the VCB

4.3 VCB System Upgrade & Restore

VCB Sytem tab define system upgrade process and Backup & Restore of the VCB server.

Upgrading VCB



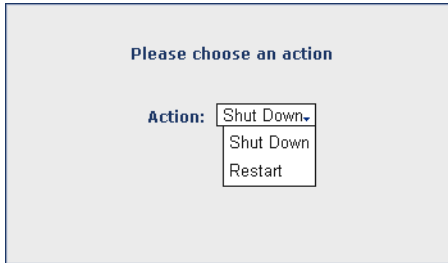
upgrading VCB

1. Save the upgrade package (upgrade.exe) you received from Emblaze-VCON to the local hard drive or network resource.
2. Click on the System tab and open the Upgrade page.
3. Click the Browse button and browse to the upgrade package location.
4. Click the Apply button.
5. At the end of the upgrade process, VCB will restart.



VCB Version number can be verified at the Settings tab, MCU Details page.

VCB Restart / Shutdown



VCB Restart / Shutdown

Restart

Restart VCB server. The EVCAAdmin application will be unavailable and you will have to login again.

Shutdown

Shutdown VCB server. Turn it on again from the power button on the front panel.

4 Setting Up the VCB

VCB Backup/Restore

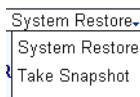
VCB supports a system backup and restore functionality to help recover immediately the system in cases of disaster.

The Backup and Restore functionality saves the baseline (Factory Default) configuration, creates a new snapshot of VCB configuration once a week for 10 weeks and allows you to manually create snapshots according to configuration changes.

At any time, you can easily restore the default VCB configuration (as was set at EVC) or return to a specific configuration state.

Action

Choose the Action you want to perform:



System restore Restore system configuration to previously saved snapshot. Snapshot can be a baseline (Factory defaults), periodic snapshots that are created automatically by the VCB, or a snapshot that was previously created by system administrator.

Take Snapshot Take a snapshot of current VCB Configuration. It is recommended to take snapshots everytime a configuration change is done, like adding new services, scheduling new meetings, etc.

System Restore

Choose the Restore option and click the Apply button:

System restore Options

Restore To Baseline	Restore system configuration to factory default snapshot (baseline) or a newly created baseline. Baseline is the basic snapshot that the system can be restored to at any time.
Restore To Last Snapshot	Restore system configuration to the latest snapshot created by the system. VCB creates a new snapshot once a week.
Restore To Date	Restore system configuration to a snapshot that was taken in a specific date. For example, if configuration changes were made and you want to restore VCB configuration to the state before these changes.
Restore To Snapshot From List	Restore system configuration to a specific snapshot that was created previously. Each snapshot represent a different configuraton state.
Password	Enterpassword for VCB backup and restore actions to ensure only authorized administrators can restore the VCB configuration. default password is 1234.

4 Setting Up the VCB

Take Snapshot

After configuration changes of the VCB like changing network settings, adding or deleting services, registering new users to gatekeeper and as a periodic backup task, it is recommended to take a snapshot of VCB configuration.

Take Snapshot	
Name:	<input type="text"/>
Description:	<input type="text"/>
Security	
Password:	<input type="password"/>

Take snapshot

1. Enter name of snapshot. This name will be listed later in the **Snapshot From List** box for restore.
2. Enter a snapshot description. The description will describe configuration state of the VCB.
3. Enter Password to protect the snapshot and to ensure that only authorized administrators can restore to this snapshot.

4.4 VCB registration to Remote MXM

You can register and manage multiple VCB's to one central.

Register VCB to another MXM

MXM address:

Register to MXM

For registering VCB to remote MXM:

1. Open the VCB EVCAAdmin application by typing the VCB's IP Address in an Internet browser address bar.
2. Login using the Administrator's user name and password.
3. Click on the System tab and then on MXM.
4. Enter the IP address of the MXM you wish to connect to.

5 SETTING UP A DEDICATED VCB SERVICE



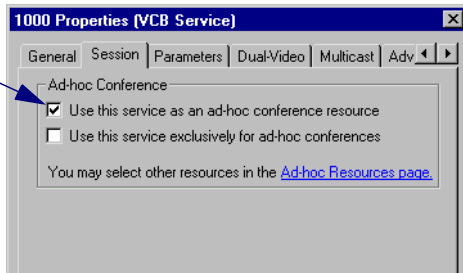
The tasks described in this chapter are procedures which you perform in Emblaze-VCON's Media Xchange Manager® (MXM) Administrator application.

5.1 Dedicated Service for End Points

A dedicated VCB service is set up only for expansion to an ad-hoc conference that includes a specific end point. That is, the service is “dedicated” to that end point. That specific end point must be either one of the original two end points of a point-to-point conference or the invited end point.

► To dedicate a service to a specific end point

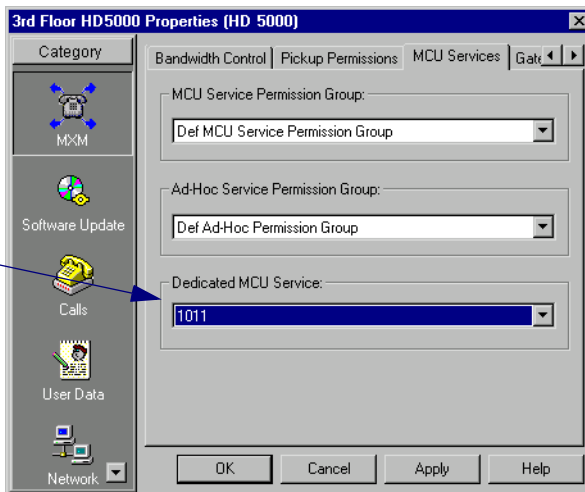
- 1 In the MXM Administrator, double-click the VCB Service and then click the **Session** tab.
- 2 Select **Use this service as an ad-hoc conference resource** and then click **OK** (in addition, you may also set the service to be exclusive for ad-hoc conferences only).



5 Setting Up a Dedicated VCB Service

- 3 Double-click the end point, click **MXM**, and then click the **MCU Services** tab.

- 4 In the **Dedicated MCU Service** list, select the service. Click **OK**.



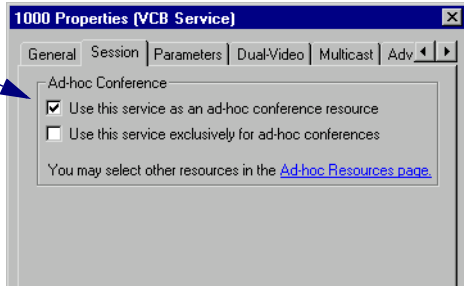
5.2 Dedicated Service for a Zone

A dedicated ad-hoc service for a neighboring zone may be used only if any of that zone's end points are in the resulting ad-hoc conference (either one of the original two end points of the conference or the invited end point).

► To dedicate a service to a specific end point

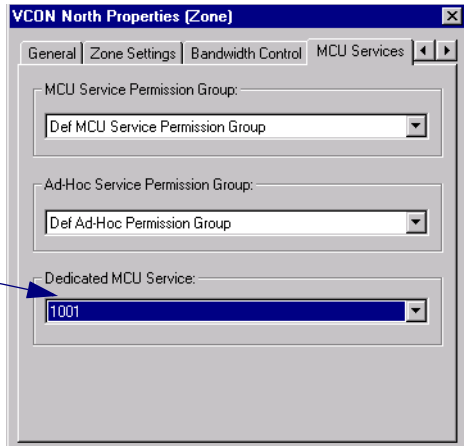
- 1 In the MXM Administrator, double-click the VCB Service and then click the **Session** tab.

- 2 Select **Use this service as an ad-hoc conference resource** and then click **OK** (in addition, you may also set the service to be exclusive for ad-hoc conferences only).



- 3 Double-click the neighboring zone and then click the **MCU Services** tab.

- 4 In the **Dedicated MCU Service** list, select the service. Click **OK**.



6 ADDING THE VCB TO AN AD-HOC PERMISSION GROUP



The tasks described in this chapter are procedures which you perform in Emblaze-VCON's Media Xchange Manager® (MXM) Administrator application.

An Ad-hoc Permission group is a set of VCB services that are defined for use in ad-hoc conferences. It helps you control the use of resources for expanding to ad-hoc conferences.

An Ad-hoc Permission group may consist of one service or multiple services. It may also include combinations of services from more than one registered VCB unit. The order in which services are requested is important and controllable by Super User-level administrators.

During expansion to an ad-hoc conference, the MXM only uses those services listed in the inviting end point's assigned permission group. After an invitation is initiated, the MXM first tries to use the first service defined in the permission group. If the first service is not available, it tries to use the second defined service, and so on. If all enabled services are unavailable, the MXM does not complete the "invitation" to the additional end point.

By default, every registered end point is assigned to the default Ad-hoc Permission Group. This may be changed when manually adding a new end point, or by editing the end point's properties.

► To add an Ad-hoc Permission Group



- 1 In the MXM Administrator applications's toolbar, click the New Ad-hoc Permission Group button. The New Ad-hoc Permission Group dialog box appears.
- 2 Change properties according to your permission group requirements. To move to the next properties page, click **Next**. For explanations about the various properties, see pages [44](#) to [46](#).
- 3 Click **Finish**. In the Main View, the new group appears under the Ad-hoc Permission Group object.

6 Adding the VCB to an Ad-hoc Permission Group

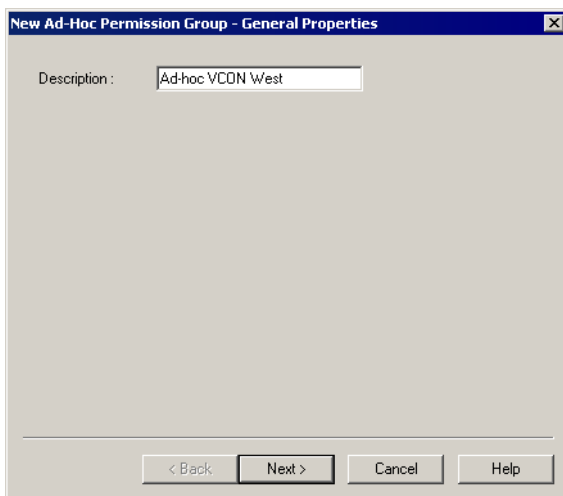
6.1 Ad-hoc Permission Group Properties

In the Ad-hoc Permission Group dialog box, you can view and change the following configuration information:

- [General](#)
- [Permission Group](#)

General

In the **Description** box, type a name for the Ad-hoc Permission Group. This name will appear on the system tree and in the VCB's Properties dialog boxes' **Product Info** tab.



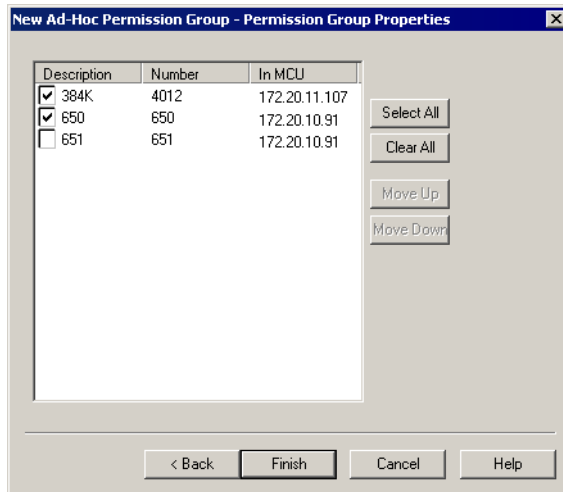
New Ad-hoc Permission Group - General Properties

Permission Group

The **Permission Group** Properties page includes all registered services that are defined for use as an ad-hoc resource, which is a service which is set up to connect ad-hoc conferences.

Select any number of VCB services from the list to be in the Ad-hoc Permission Group. The group may also include combinations of services from more than one registered VCB unit.

- To place all services in the permission group, click **Select All**.
- To clear all the selections, click **Clear All**.



New Ad-hoc Permission Group - Permission Group Properties

6 Adding the VCB to an Ad-hoc Permission Group

Setting the Usage Order

The services' locations in the list determines the order in which the MXM tries to use them. After an end point invites another end point, the MXM first tries to use the first service defined in the permission group. If the first service is not available, it tries to use the second defined service, and so on. If all enabled services are unavailable, the MXM does not complete the "invitation" to the additional end point.

In the Permission Group page, you can move the services to different places in the usage order.

➤ To set the usage order of the selected services

- ☐ Click the name (*not* the checkbox) of a selected service. To move the service up and down the list to its designated place, click **Move Up** or **Move Down** as many times as necessary.

Repeat this step for as many services as necessary.

7 AD-HOC CONFERENCING

To “invite and join” additional parties into an ad-hoc videoconference, users must initiate the Invite function from their videoconferencing application during an open session.

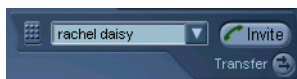
This chapter instructs how to invite from the following Emblaze-VCON applications:

- xPoint
- vPoint HD
- HD5000/4000
- HD3000/2000/1000/600
- Other H.323 videoconferencing applications

7.1 Inviting from vPoint™/vPoint HD

➤ To invite and join other contacts into an ad-hoc conference

- 1 Enter an additional contact's user number (E.164) or address into the Manual Dialer's address box.
- 2 Click **Invite**.



-or-

- 1 Open the Dialer and locate the contact that you want to invite.
- 2 Right-click the contact and then click **Invite**.

7 Ad-Hoc Conferencing



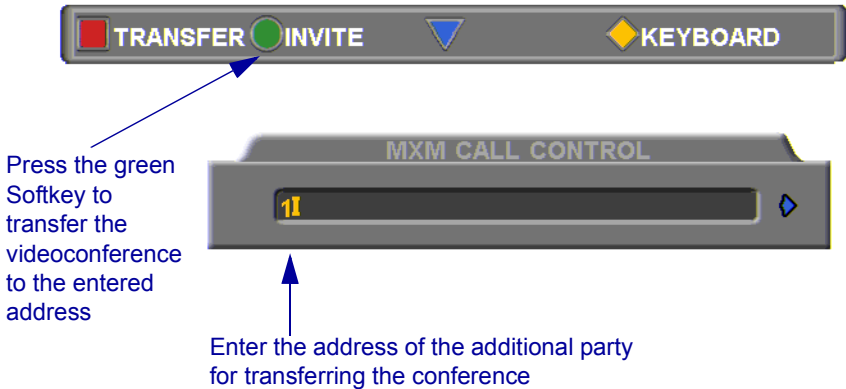
The session is now a multipoint conference. The parties' video is displayed in *Continuous Presence* (multiple users' video on screen at all times) or *Voice-Activated Switching* (speaker's video only on screen), in accordance with the MCU/VCB Service configuration.

7.2 Inviting from HD3000/2000/1000/600

- 1 Press any of the number keys on the remote control. The Manual Dial dialog box and SoftKey menu open.
- 2 Press the red **MXM CALL CONTROL** Softkey.



- 3 In the MXM Call Control box, enter the directory number of the party that you want to invite. To browse entries from the Phone Book, press the right and left arrow keys on the remote control.
- 4 Press the green **INVITE** SoftKey.



- 5 The HD device dials the number.

After several seconds, the additional party is added to the session, which is now a multipoint conference with VCB management. The parties' video is displayed in Voice-Activated Switching.

7.3 Inviting from HD5000/4000

► To invite and join other parties into an ad-hoc videoconference



- 1 Click the Telephony Services button to open the Telephony Services menu.

- 2 Click *Invite User*.

- 3 In the Dial Plan Number box, enter an additional party's user number.
-or-



Click the Online Directory button and choose a name from the Online Directory Dialer.



- 4 Click the Dial button.

After several seconds, the additional party is added to the session, which is now a multipoint conference. The parties' video is displayed in *Continuous Presence* (multiple users' video on screen at all times) or *Voice-Activated Switching* (speaker's video only on screen), in accordance with the MCU/VCB Service configuration.

7.4 Inviting from Other H.323 Videoconferencing Applications

In VCON's MediaConnect 6000 and other H.323 videoconferencing applications, you must enter a code in order to invite other users to an ad-hoc videoconference. If you do not know the code, ask the system administrator.

➤ To invite and join other parties into an ad-hoc videoconference

- 1 During an ongoing point-to-point videoconference, open your application's Dialing utility.
- 2 Dial *77 (or an administrator-defined value) followed by the [*additional user's directory number*]. For example, dial *77751 to invite end point 751 into the videoconference.
- 3 After dialing, an Incoming Call message may appear. Accept the call.

The session is now a multipoint conference. The parties' video is displayed in *Continuous Presence* (multiple users' video on screen at all times) or *Voice-Activated Switching* (speaker's video only on screen), in accordance with the MCU/VCB Service configuration.

8 CHAIR CONTROL DURING CONFERENCES

As an option, organizations employing the VCB may utilize Emblaze-VCON's Moderator (EVCModerator), which allows users to schedule conferences in advance and control their progression, including Chair Control. Chair Control is the ability of one videoconferencing user to control what the other participants in a multipoint conference see and hear. The VCB provides many view layout schemes and bandwidth allocation for the Chair Control capabilities.



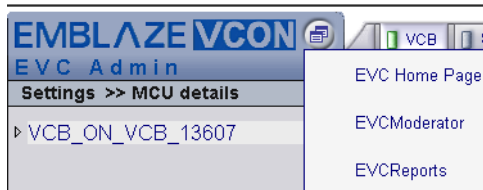
As factory settings, Moderators, MXM Users and Power Users may control the Chair, although users with Administrator privileges may change the roles of the various types of users.

Chair Control is available during an open videoconference from the Conference Moderator's In Progress page.

► To open the Conference Moderator



- 1 In the VCB Configuration application, click the Select Application button near the top of the page and then click **EVCModerator**.



Opening Conference Moderator

- 2 If the Login screen appears, enter your **Login Name** and **Password**.
- 3 Click **Login**.

8 Chair Control During Conferences

► To control the Chair

Move to In Progress tab while call is connected.

- 1 On the right side of the screen, click **Chair Control**.



Click either the **Chair Control** button or the hotspot.

Opening the Chair Control

- 2 Set Chair Control parameters for the session

Used By

Choose the participants who will view the conference according to the parameters you set now. In this version, the only available option is **All** participants.

Used by:

Control

Choose the level of chair control.

Simple is used for normal conferece management.

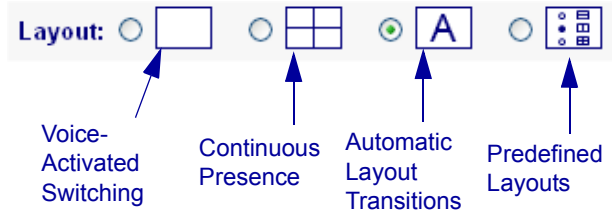
Control:

Lecture control allows the chair control to set specific participant as a lecturer. In this mode, all participants will see the lecturer in full screen and he will see all other participants in automatic layout.

Control:
Lecturer:

Layout

Select a layout scheme. You may change this during a session.



The available viewing methods are:

- ☐ **Voice-Activated Switching** - The participants see the video of the participant whose audio signal is strongest. For example, the non-speaking participants see the person speaking.
- ☐ **Continuous Presence** - 4 participants in a multipoint conference are viewed and heard simultaneously.
- ☐ **Automatic Layout Transitions** - Dynamic layout schemes, according to the selected scheme and the number of connected participants. As the number of connected participants changes, the display layout changes accordingly.

Available schemes are:

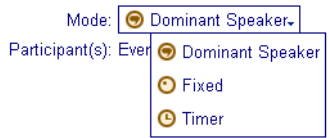
- 1->2->3->2*2->3*3->4*4
- 2->2+8
- 1->1+5->1+7

- ☐ **Predefined Layouts** - A choice of layouts. Clicking the arrow buttons browses through all the display options.

- 3** Choose one of the Display Switching modes, depending on the chosen display method.

If the viewing method is **Voice-Activated Switching** or **Continuous Presence**, choose the view switching mode:

8 Chair Control During Conferences



Dominant Speaker

Showing the most recent speaker in the conference. In a Continuous Presence layout, the “dominant speaker” appears in one of the frames.

Fixed

Showing specific views throughout the conference’s duration, selected by the conference’s initiator.

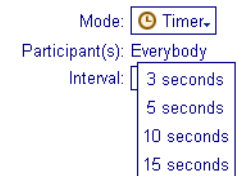
From the **Participant** list box, choose the name of the user whose video will be seen.



Timer

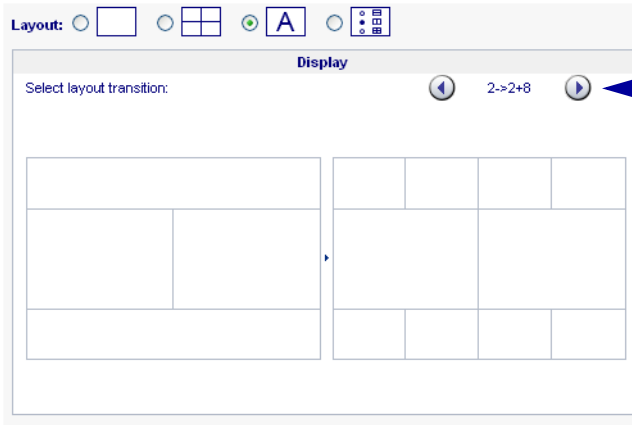
Showing a cycle of views at rotating, timed intervals.

From the **Interval** list box, choose the rate for changing the display.

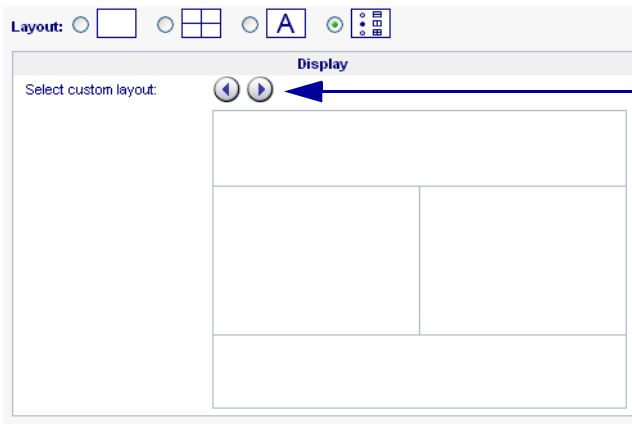


If the viewing method is **Automatic Layout Transitions** or **Predefined Layouts**, click the arrow buttons to browse through the layout options:

8 Chair Control During Conferences



In Automatic Layout mode, click the arrow buttons to select a layout and then click **Apply**.



In Predefined Layout Transition mode, click the arrow buttons to select a layout and then click **Apply**.

4 Click **Apply**.

9 UPGRADING THE VCB LICENSE KEY

Replacing your VCB license key is required if you need to change the number of permitted concurrent participants.

In the Web Management program, the **Upgrade** page contains your VCB's license key, number of licensed ports, and the expiration date. When you order an upgrade, please supply this information to your Emblaze-VCON representative according to the instructions below.

➤ To upgrade your VCB license

- 1 After logging in, click the **Settings** tab and then **Upgrade**.

MCU details	License
License: Number of ports: 0/12 (0% used) Expiration date: Never	
License key:	<div> <div>CFD24382FE683E7A4031661365673B0CB4CED8B04B6B15143D21EEE3635CF</div> <div>94C439FCFE3A66A18BACFF9C5410A9B137FF0395F55193451C100055B2429</div> <div>399345B87D3194DD35F67B9FC910A19114A5CF9D776D9E23CCA35C37ACD5C</div> <div>8E4D7D4B7599A9721A48C3CB35D825B8FAB915CC610BC58133ECEA58B4AFF</div> <div>F413561C90C2604B32D9B4E824C60F0BAAF9FDE2A8239F838A58FD6ACD679</div> <div>FBEC7C2935F09D1A7A7EB7471B0A6E413D2822A8F55197723BABC88E1223</div> <div>BF09BBC0F8F118D5B68666C5F9320112866DCD62FCA7FE4CC742108DAE224</div> </div>
* Please paste new licence key into the text area and press apply button.	

VCB Upgrade and License Information

- 2 Select and copy the license key on the page.
- 3 Contact your local Emblaze-VCON representative and send the license file according to the instructions you receive.

After processing your order, the Emblaze-VCON representative will send you a new license key by e-mail.

- 4 Copy the new key. In the Web Management's Upgrade page, select the previous key and paste the new one.
- 5 Click **Apply**.

10 SSH COMMANDS

This chapter defines the commands available when you access the VCB unit through a Secure Shell (SSH), Hyperterminal, or similar application connected to the Console port.

A Secure Shell application, PuTTY, is included on the CD-ROM supplied in your VCB package.

➤ To run the PuTTY program

- 1 Insert the VCB compact disc to your computer's CD drive.
- 2 Browse to the Utilities folder's *putty.exe* program.
- 3 Copy the *putty.exe* file to your desktop or another location.
- 4 Double-click the file's icon to run the program.

➤ To connect to the VCB

- 1 In the **Host Name** box, type the VCB host computer's IP address.
- 2 Click **Open**.
- 3 Log in using the following parameters:

User Name VCBAdmin

Password evc123\$

10.1 Descriptions of SSH Commands

Command	appupgrade
Syntax	appupgrade <path>
Description	Upgrade to a new version of the VCB. Path - location of the install file. For example: appupgrade vcb/install.exe

10 SSH Commands

Command	changeservicestartmode
Syntax	<code>changeservicestartmode <Service Name><Mode></code>
Description	Change the specified service's starting mode.
Parameters	<input type="checkbox"/> Automatic <input type="checkbox"/> Manual <input type="checkbox"/> Disabled For example: TermService , a service allowing remote desktop connection, is disabled by default. To enable it, set the service start mode to Manual, and then start the service using the “startservice” command. <code>changeservicestartmode TermService Manual</code>
Command	clearevents
Syntax	
Description	Delete all entries from the application, security, and system event log.
Command	exec
Syntax	<code>exec <command></code>
Description	Execute the specified shell command. Only VCBSupport-level users are allowed to execute this command.
Command	getevents
Syntax	<code>getevents <substring></code>
Description	Display application, security, and system event log. If a substring is specified, only events related to the substring will be listed.

Command	getparam
Syntax	getparam <param>
Description	Retrieve the specified parameter.
Parameters	<input type="checkbox"/> appver - Display the VCB/MXM application version. <input type="checkbox"/> dhcp <0-3> - Display DHCP-defined IP configuration of the specified NIC, and if it's enabled or disabled. <input type="checkbox"/> hwserial - The first NIC's MAC address. <input type="checkbox"/> machinename - The name of the node. <input type="checkbox"/> sshver - Display the SSH Server version. <input type="checkbox"/> time - Display the current system date and time.

Command	getvcbadminparam
Syntax	getvcbadminparam <1> <param>.
Description	Retrieve the specified VCB Admin parameter.
Parameters	Name and password of the administrator. For example: getvcbadminparam 1 password 1234

Command	getvcbridgeparam
Syntax	getvcbridgeparam <param>
Description	Retrieve the specified VCB parameter. To display a list of parameters, type only the command and press <Enter>.

Command	getvcbsessionparam
Syntax	getvcbsessionparam <service number> <param>.
Description	Retrieve the specified VCB Session parameter. To display a list of parameters, type only the command and press <Enter>.

10 SSH Commands

Command	healthcheck
Syntax	
Description	Displays system information about the VCB's host computer, such as CPU usage, virtual memory usage.
Command	help
Syntax	
Description	Lists all SSH commands and their possible syntaxes.
Command	killprocess
Syntax	killprocess <process identity>
Description	Aborts the specified process.
Command	listip
Syntax	listip <0-3>
Description	Displays the IP address of the specified NIC.
Command	ping
Syntax	ping <hostname or IP address>
Description	Check if a connection to the specified computer is online.
Command	processes
Syntax	processes <substring>
Description	Display a list of processes. If a substring is specified, only processes containing the substring will be listed.
Command	restart
Syntax	
Description	Restart the VCB unit.
Command	restartservice
Syntax	restartservice <Service Name>
Description	Restarts the specified service.

Command	services
Syntax	services <service substring>
Description	<p>Lists the services that start with the substring and displays their status.</p> <p>services VCON will list only VCON services. For example,</p> <ul style="list-style-type: none"> • VCON VCB AGENT_1
Command	setgkaddress
Syntax	setgkaddress <IP address>
Description	Define an IP address to the associated MXM.
Command	setmcuaddress
Syntax	setmcuaddress <IP address>
Description	Define an IP address to this VCB.
Command	setparam
Syntax	setparam <param>
Description	Define the specified parameter.
Parameters	<ul style="list-style-type: none"> <input type="checkbox"/> dhcp <0-3> - Enable DHCP to define the IP configuration of the specified NIC. <input type="checkbox"/> ipstatic <0-3><IP address><Subnet><Gateway> - Define a static IP configuration of the specified NIC. <input type="checkbox"/> machinename - Define the name of the node. <input type="checkbox"/> time - Set the current system date and time.
Command	setpassword
Syntax	setpassword <user name>
Description	Defines the user password. If a user name is specified, the password change applies to that user name only.

10 SSH Commands

Command	setvcbadminparam
Syntax	setvcbadminparam <number> <param>.
Description	Define the specified VCB Admin parameter.
Parameters	Name and password of the administrator.
Command	setvcbridgeparam
Syntax	setvcbridgeparam <param>
Description	Define the specified VCB parameter.
Command	setvcbsessionparam
Syntax	setvcbsessionparam <service number> <param> <value>.
Description	Define the specified VCB Session parameter.
Command	shutdown
Syntax	
Description	Shut down the VCB unit and turn its power off.
Command	startservice
Syntax	startservice <Service Name>
Description	Starts the specified service.
Command	stop service
Syntax	stopservice <Service Name>
Description	Stops the specified service.
Command	upgrade
Syntax	
Description	Upgrade to a new version of the SSH Server.